



## FINANCIAL SUPPORT

The Eastern University believes that a combination of quality students and quality teachers is a prerequisite for quality education. So it offers facilities like tuition fee waivers, scholarships, student loans, on campus jobs, etc., to encourage meritorious students to come to Eastern University. The details of the financial support are as follows.

### Undergraduate Programs

#### Fee Waiver on Previous Results\*\*

Range of Average GPA in S.S.C. & H.S.C. or Equivalent Exams	Tuition Fee Waiver*
GPA 5 (without 4 <sup>th</sup> Subject)	100%
4.80 - 5.00 (with 4 <sup>th</sup> Subject)	50%
4.50 - 4.79	20%
4.00 - 4.49	10%

\*Maximum for 1 year subject to maintenance of a minimum GPA 3.00 in EU

#### Scholarship based on Semester Results

Range of GPA in EU Semester Exams	Scholarships*
4.00	50%
3.75 - 3.99	20%
3.50 - 3.74	10%

\* Either one whichever is higher from 2<sup>nd</sup> Semester.

### Special Facilities

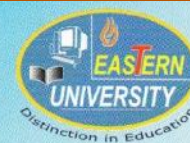
- 10% special tuition fee waiver for female students of all programs
- 25% tuition fee waiver for sibling and husband-wife
- 25% tuition fee waiver for physically disadvantaged and acid victims
- 15% tuition fee waiver for tribal students
- Interest-free loans for financially disadvantaged students

### Admission Office

House 26, Road 5, Dhanmondi, Dhaka-1205

Phone: 9671912, 9671925. Mobile: 0174 1300002, 0182 3660833

[www.easternuni.edu.bd](http://www.easternuni.edu.bd)



# Eastern University

## Electronic & Telecommunication Engineering



### Program:

B. Sc. in Electronic & Telecommunication Engineering

### Department of

Electrical and Electronic Engineering  
House 15/2, Road 3, Dhanmondi, Dhaka-1205

### Faculty of Engineering and Technology

House 15/2, Road 3, Dhanmondi, Dhaka-1205

Phone: 9677523, 8621419



## INTRODUCTION

Eastern University offers a program leading to the Degree of B. Sc. in Electronic and Telecommunication Engineering (ETE) in the department of EEE under the Faculty of Engineering & Technology. The total credit hours required for the degree of B. Sc. (ETE) is 155. The curriculum has been designed to make the program goal-oriented to effectively fulfill the present and future needs of the telecommunication age.

## JOB OPPORTUNITIES

(Home and Abroad)

Telecommunication companies, National & Multinational Electrical & Electronic companies, Radio & Television, IT companies etc.

## FACILITIES

- Well-equipped class rooms with AC, Multimedia Projectors.
- Free Internet facilities for all students.
- Provisions for industrial training.
- Teachers' lecture notes are available in the web.
- Sophisticated computer laboratories with plenty of computers.
- Digital and electronic laboratories.
- Highly qualified faculty members from home and abroad.
- Credit transfer facilities to reputed foreign universities.
- Excellent library facilities.
- Provision for Merit scholarships.

## ENTRY REQUIREMENT

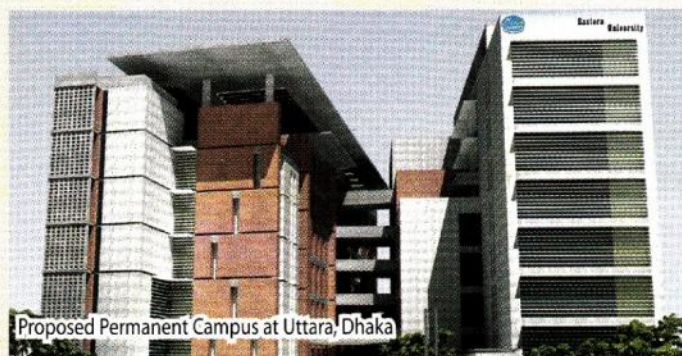
Candidates with minimum GPA of 2.50 in both SSC/Dakhil and HSC/Alim/Diploma from Technical Education Board or minimum GPA of 2.00 in one of those exams with total GPA of 6.00 in both the exams are eligible for admission. The GCE students must have passed five subjects in O-Level and two subjects in A-Level.

## DURATION OF THE PROGRAM

The duration of the Program is four years divided into 12 semesters.

## GRADUATION REQUIREMENT

To obtain B.Sc. (ETE) degree a student will have to complete 155 cr. hours with a minimum CGPA of 2.50.



## COURSE DISTRIBUTION

Credit hours requirement of B.Sc. in ETE program are given below:

Courses	No. of courses	Credit	Total credit
<b>Preliminary</b>			
1. English	3	6.0	73.0
2. Mathematics	5	15.0	
3. Statistics	1	3.0	
4. Physics	2	7.0	
5. Chemistry	1	4.0	
6. Humanities	5	12.0	
7. CSE	4	13.0	
8. Civil	1	1.0	
9. EEE	3	12.0	
<b>Core</b>	20	--	67.0
<b>Elective (Major)</b>	3	--	9.0
<b>Thesis/Project Work</b>	--	6.0	6.0
<b>Total</b>	48	--	155

## COURSES OFFERED IN B.Sc. (ETE) PROGRAM IN 12 SEMESTERS

First Semester			
Course No.	Course Name	Credits	Prerequisite
CSE 110	Computer Fundamentals Laboratory	1.0	
ENG 103	Listening and Speaking	2.0	
SOC 101	Introduction to Sociology	3.0	
MAT 101	Calculus I	3.0	
PHY 101	Physics I	3.0	
PHY 102	Physics I Laboratory	1.0	
Second Semester			
EEE 111	Basic Electrical Circuits	3.0	
EEE 112	Basic Electrical Circuits Laboratory	1.0	
ENG 107	Reading and Grammar	2.0	
MAT 103	Calculus II	3.0	MAT 101
PHY 103	Physics II	3.0	PHY 101
Third Semester			
CSE 103	Structured Programming Language	3.0	CSE 110
CSE 104	Structured Programming Language Laboratory	1.0	
EEE 113	Alternating Current Circuits	3.0	EEE 111
EEE 114	Alternating Current Circuits Laboratory	1.0	
ENG 111	Writing	2.0	
MAT 105	Geometry and Complex Variables	3.0	
Fourth Semester			
CHM 201	Chemistry	3.0	
CHM 202	Chemistry Laboratory	1.0	
ETE 231	Electronics I	3.0	EEE 111
ETE 232	Electronics I Laboratory	1.0	
MAT 201	Differential Equations	3.0	
Fifth Semester			
CEN 210	Engineering Drawing	1.0	
ETE 210	Circuit Simulation Laboratory	1.0	EEE 111
ETE 233	Electronics II	3.0	ETE 211
ETE 234	Electronics II Laboratory	1.0	
HUM 201	Values and Ethics	3.0	
MAT 203	Linear Algebra	3.0	
MGT 201	Industrial Management	2.0	



### Sixth Semester

ACT 201	Principles of Accounting	2.0	
CSE 201	Numerical Methods	3.0	CSE 103 CSE 104
CSE 202	Numerical Methods Laboratory	1.0	CSE 104
EEE 255	Electrical Machine	3.0	
EEE 256	Electrical Machine Laboratory	1.0	
ETE 271	Analog Communication Engineering	3.0	
ETE 272	Analog Comm. Engineering Lab	1.0	

### Seventh Semester

ECO 301	Principle of Economics	2.0	
ETE 311	Signals and Linear Systems	3.0	EEE 113
ETE 371	Electric and Magnetic Fields	3.0	EEE 113 MAT 105
ETE 379	Telecommunication Engineering	3.0	
STS 301	Fundamentals of Statistics	3.0	

### Eighth Semester

ETE 330	Electrical and Electronic Shop Practice	1.0	ETE 233
ETE 331	Digital Electronics	3.0	ETE 233
ETE 332	Digital Electronics Laboratory	1.0	
ETE 353	Measurement and Instrumentation	3.0	
ETE 354	Measurement and Instrumentation Laboratory	1.0	
ETE 373	Engineering Materials	3.0	

### Ninth Semester

ETE 315	Digital Signal Processing I	3.0	ETE 311
ETE 375	Optoelectronics	3.0	
ETE 376	Optoelectronics Laboratory	1.0	
ETE 377	Digital Comm. and Telephony	3.0	STS 301 ETE 331
ETE 378	Digital Comm. and Telephony Laboratory	1.0	

### Tenth Semester

ETE 400	Thesis / Project	2.0	
ETE 411	Control System I	3.0	ETE 311
ETE 412	Control System I Laboratory	1.0	
ETE 431	Microprocessors and Interfacing	3.0	ETE 331
ETE 432	Microprocessors and Interfacing Laboratory	1.0	
ETE 471	Wireless & Mobile Communication	3.0	
ETE 472	Wireless & Mobile Communication Laboratory	1.0	

### Eleventh Semester

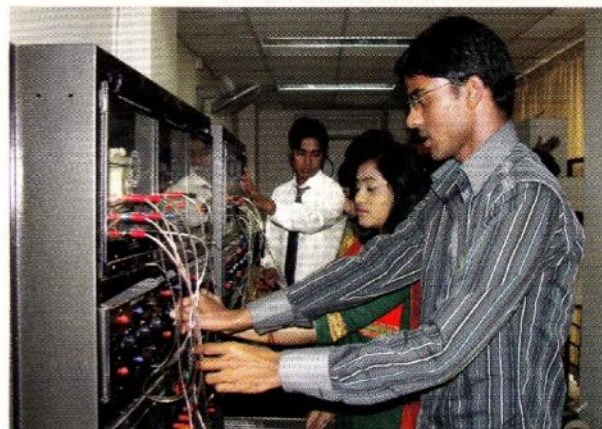
CSE 457	Computer Networks	3.0	ETE 431
CSE 458	Computer Networks Laboratory	1.0	
ETE 4 <sup>+</sup>	Elective I	3.0	
ETE 4 <sup>+</sup>	Elective II	3.0	
ETE 400	Thesis	2.0	
ETE 435	VLSI I	3.0	ETE 331
ETE 436	VLSI I Laboratory	1.0	ETE 331

### Twelfth Semester

ETE 4 <sup>+</sup>	Elective III	3.0	
ETE 400	Thesis	2.0	
ETE 433	Solid State Devices	3.0	ETE 331
ETE 473	Microwave Engineering	3.0	

### ELECTIVE COURSES (ANY THREE INCLUDING LAB)

Course No	Course Name	Credits
ETE 415	Biomedical Instrumentation	3.0
ETE 416	Biomedical Instrumentation Laboratory	1.0
ETE 417	Digital Signal Processing II	3.0
ETE 418	Digital Signal Processing II Laboratory	1.0
ETE 437	VLSI II	3.0
ETE 438	VLSI II Laboratory	1.0
ETE 439	Analog Integrated Circuits	3.0
ETE 441	Processing and Fabrication Technology	3.0
ETE 475	Broadcasting Engineering	3.0
ETE 476	Broadcasting Engineering Laboratory	1.0
ETE 477	Information Theory	3.0
ETE 478	Information Theory Laboratory	1.0
ETE 479	Optical Communication	3.0
ETE 480	Optical Communication Laboratory	1.0
ETE 481	Industrial and Power Electronics	3.0
ETE 482	Industrial and Power Electronics Laboratory	1.0
ETE 483	Radar & Satellite Communication	3.0
ETE 484	Radar and Satellite Communication Laboratory	1.0
ETE 485	Cryptography and Network Security	3.0
ETE 486	Cryptography and Network Security Laboratory	1.0
ETE 486	Multimedia Communication and Services	3.0
ETE 487	Multimedia Communication and Services Laboratory	1.0
ETE 489	Antenna and Propagation	3.0



Communication Lab

### A. Regular:

### FACULTY MEMBERS

#### Prof. Dr. Md. Nurul Islam

Ph.D., University of Glasgow, UK

M.Sc., University of Dhaka

B.Sc. (Hons), University of Dhaka

Former Dean, Faculty of Science, Chittagong University

Former Dean, Faculty of Modern Science, IIUC

Former Dean, Faculty of Science and Engineering, NUB

Dean, Faculty of Engineering & Technology

#### Prof. Dr. Mirza Golam Rabbani

Ph.D., National University of Singapore

M.Tech in Electrical Engineering, IIT Kharagpur, India

B.Sc. in Electrical and Electronic Engineering, RU

Former Head, Department of EEE, RUET

Professor, Department of EEE

Dr. Md. Abu Bakar Siddiqui

Ph.D., (Telecom. Engg.), Bulgaria

M.Sc. in Telecom. Engg., Bulgaria

Assistant Professor, ETE

Program Coordinator (EEE Evening)



Farewell & Cultural Program 2012



**Dr. Md. Mahfuzur Rahman**

Ph.D., Hiroshima University, Japan  
M.Sc. in CSE, Zhejiang University, China  
**Associate Professor, Faculty of E & T**

**Dr. Md. Shawkut Ali Khan**

Ph.D., Kanazawa University, Japan  
M.Sc. (Engg.) in ME,  
Kanazawa University, Japan  
B.Sc.(Engg.) in ME, CUET  
**Assistant Professor, ME**

**Ms. Mahmuda Binte Mostofa Ruma**

M.Phil, BUET  
M.Sc. in Mathematics, DU  
**Assistant Professor, Mathematics**

**Ms. Farzana Rahmat Zaki**

B. Sc. in EEE, BUET  
**Sr. Lecturer, EEE**  
**Program Coordinator (EEE Day)**

**Mr. Mohammad Abdur Rob**

M.Sc. in Mathematics, CU  
Asst. Proctor, Faculty of E & T  
**Sr. Lecturer, Mathematics**  
**Assistant Proctor**

**Ms. Fahmida Rahman**

B.Sc. in Physics, DU  
M.Sc. in Physics, DU  
M.Phil (Solid State Physics), BUET  
**Sr. Lecturer, Physics**

**Ms. Gulshan Khatun**

M.Sc in Mathematics, DU  
**Sr. Lecturer, Mathematics**

**Mr. Md. Mastak Al-Amin**

M.Sc. in Econ. Demography, Sweeden  
**Sr. Lecturer, Statistics**

**Mr. Abdul Quader**

M.Sc. in Physics, RU  
**Sr. Lecturer, Physics**

**Mr. Md. Mijanur Rahman**

B.Sc. in EEE, DUET  
**Lecturer, EEE**

**Mr. Md. Shariful Islam**

B.Sc. in EEE, RUET  
**Lecturer, EEE**

**Mr. S. M. Shakil Hassan**

B.Sc. in EEE, EU  
**Lecturer, EEE**

**Md. Ishuque Hossain**

B.Sc. in EEE, RUET  
**Lecturer, EEE**

**Kazi Rizwanul Hoq**

B.Sc. in EEE, CUET  
**Lecturer, EEE**

**Mahmuda Akter Monne**

B.Sc. in EEE, EU  
**Lecturer, EEE**

**Md. Ashif Iqbal Sikder**

B.Sc. in EEE, BUET  
**Lecturer, EEE**

**Md. Juel Rana**

B.Sc. in EEE, RUET  
**Lecturer, EEE**

**Adnan Mohammad**

B.Sc. in EEE, AIUB  
**Lecturer, EEE**

**Kazi Saiful Islam**

B.Sc. in EEE, BUET  
**Lecturer, EEE**

**B. On Study Leave:**

**Ms. Afsana Ahamed**

M.Sc. Engineering in Communication  
and Electronics, BUET  
B.Sc. in Electronics and Communication  
Engineering, Khulna University  
**Sr. Lecturer, EEE**

**Mr. Md. Jamil Feroj**

B. Sc. in EEE, AIUB  
**Lecturer, EEE**

**Sakib Mohammed Muhtadi**

B. Sc. in EEE, KUET  
**Lecturer, EEE**

**Abu Shafin Mohammad Mahdee Jameel**

B. Sc. in EEE, BUET  
**Lecturer, EEE**

**Md. Nahidul Ambia**

B. Sc. in EEE, IUT  
**Lecturer, EEE**

**Nahid Mushfique Jawad**

B. Sc. in ETE, NSU  
**Lecturer, ETE**

**C. Adjunct:**

**Prof. Dr. Aynal Haque**

Ph.D., Muroran Institute of Technology, Japan  
**Professor, Department of EEE, BUET**

**Prof. Dr. Nikhil Ranjan Dhar**

Ph.D., (Manufacturing) IIT, Kharagpur, India  
**Professor, Department of IPE, BUET**

**Engr. Md. Nuruzzaman**

B. Sc. In EEE,  
Manager, GMD Dhaka, North-West.  
PGCB Ltd

**Dr. Ms. Samia Subrina**

Ph. D., USA  
**Assistant Professor, Department of EEE, BUET**

**Dr. Lutfa Akter**

Ph. D., USA  
B. Sc. & M. Sc. In EEE, BUET  
**Assistant Professor, Department of EEE, BUET**

**Apratim Roy**

B. Sc. & M. Sc. In EEE, BUET  
**Assistant Professor, Department of EEE, BUET**